

REMARKS

Claims 2, 8, 10, 13-17 and 23 are amended, no claims are canceled, and claims 84 and 85 are added; as a result, claims 1-23 and 84-85 are now pending in this application.

Claims 8 and 13 are amended to clarify the recitation of a feature so that is more closely corresponds to the same feature recited in a parent claim. This amendment is for clarification and is not narrowing.

Claims 14-17 and 23 are amended to correct minor typographical errors in the claims. It is believed that these amendments merely clarify the claims, which were understood by the examiner. Moreover, these amendments are believed to not narrow the claims.

Double Patenting Rejection

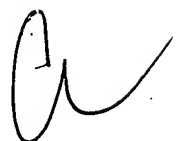
Claims 1-23 were provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-23 of copending Application No. 09/943,134 and over claims 1-22 of copending Application No. 10/028,001. Applicant will consider filing a Terminal Disclaimer once the scope of allowed claims in this application is determined. Moreover, as this is a provisional rejection, it may be later withdrawn.

§112 Rejection of the Claims

Claims 14-17 and 23 were rejected under 35 USC § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. Applicant respectfully traverses. Applicant believes that claims 14-17 and 23 as originally filed meet the statutory requirements of 35 USC § 112, second paragraph. Reconsideration is requested.

§102 Rejection of the Claims


Claims 1-23 were rejected under 35 USC § 102(e) as being anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Lee et al. U.S. Patent Application Publication 2002/0106536 (Publication '536). Applicant respectfully traverses.



The Office Action states that Lee (Publication '536) discloses "... wherein the control gate is separated from the floating gate by an asymmetrical low tunnel barrier intergate insulator 18 or 20 formed by multiple atomic layer deposition (Lee's claim 44, claim 11, and paragraph [0058]." The Office Action admits that Publication '536 does not label the insulation layer 18 or 20 being "an asymmetrical low tunnel barrier intergate insulator" as claimed by the applicant. The Office Action further states that Lee's structure does not distinguish from the claimed structure. The Office Action goes on to state that labels or statements of intended use are meaningless.

Anticipation requires the disclosure in a single prior art reference of each element of the claim under consideration. *In re Dillon* 919 F.2d 688, 16 USPQ2d 1897, 1908 (Fed. Cir. 1990) (en banc), cert. denied, 500 U.S. 904 (1991). "The identical invention must be shown in as complete detail as is contained in the ... claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989); MPEP § 2131. "Anticipation requires the presence in a single prior reference disclosure of each and every element of the claimed invention, *arranged as in the claim*." *Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co.*, 730 F.2d 1452, 221 USPQ 481, 485 (Fed. Cir. 1984) (citing *Connell v. Sears, Roebuck & Co.*, 722 F.2d 1542, 220 USPQ 193 (Fed. Cir. 1983)) (emphasis added). Moreover, functional language is specifically authorized by *In re Swinehart*, 439 F.2d 210, 169 USPQ 226 (CCPA 1971); *In re Caldwell*, 138 USPQ 243 (CCPA 1963); *Lewmar Marine, Inc. v. Barient, Inc.*, 827 F.2d 744, 3 USPQ2d 1766 (Fed. Cir. 1987 ("so that" functional clause of claim renders reference non-anticipating); MPEP § 2173.05(g).

Applicant submits that Publication '536 does not teach or suggest all of the features of claim 1. Specifically, claim 1 recites, in part "wherein the control gate is separated from the floating gate by an *asymmetrical* low tunnel barrier intergate insulator formed by multiple atomic layer deposition (ALD) [*italics added*]." Publication '536 does not teach or suggest an asymmetrical low tunnel barrier intergate insulator as recited in claim 1. The adjective "asymmetrical" is not merely a label. As recited in claim 1, "asymmetrical" is an adjective that describes a physical feature of the intergate insulator. Publication '536 is silent as to this feature of an intergate insulator. Accordingly, Publication '536 does not teach all of the features of claim 1 and does not show the features in as complete detail as is contained in claim 1.



Applicant is also confused as to the statement in the Office Action that states "Lee's structure does not distinguish from the claimed structure." Applicant respectfully submits that this analysis is incorrect. The USPTO has the initial burden to establish a *prima facie* case of unpatentability by providing a claim construction and then reading the claim onto the prior art. However, it appears that the examiner is looking for features in Lee that distinguish over the pending claims. This is not the correct analysis. Clarification is requested.


Applicant further submits that the examiner can not merely ignore the term "asymmetrical" as it appears in the claims. In order to present a *prima facie* case of unpatentability, the examiner must present an analysis that compels a conclusion that a claim is unpatentable under the preponderance of evidence, burden of proof standard, giving each term in a claim its broadest reasonable construction consistent with the specification. 37 C.F.R. 1.56(b)(2)(ii). Applicant submits that such an analysis has not been conducted for the term "asymmetrical" as recited in the claims

Based at least on the above applicant submits that a *prima facie* case of unpatentability has not been made. Reconsideration and allowance of claims 1-23 is requested.

Claims 1-23 were rejected under 35 USC § 102(e) as being anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Nguyen et al. U.S. Patent Application Publication 2002/0137250 (Publication '250). Applicant traverses.

First, applicant submits that claims 1-23 are allowable over Nguyen for substantially similar reasons as stated above. Specifically, applicant can not find where Nguyen teaches or even suggests "an asymmetrical low tunnel barrier intergate insulator" as recited in the claims. The term "asymmetrical" is not a statement of intended use but describes a physical characteristic of the intergate insulator. Moreover, the examiner appears to have equated "asymmetrical" with "graded" as used in Nguyen. However, "graded" and "asymmetrical" are not equivalent terms.

The Office Action asserts that Nguyen's NLA layer could function as the claimed invention. The fact that a reference could be modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. *In re Mills*, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990); MPEP § 2143.01. Thus, the mere assertion that Nguyen could be modified is not enough to reject the pending claims. Applicant requests an



explicit statement as to the motivation to modify Nguyen to have "an asymmetrical low tunnel barrier intergate insulator" as recited in the claims to clarify issues for appeal.

Claims 1-6, 9-11, and 14-17 were rejected under 35 USC § 102(b) as being anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Lee et al. U.S. Patent 5,923,056 (patent '056). Applicant respectfully traverses for substantially similar reasons as stated above. Specifically, patent '056 does not teach "an asymmetrical low tunnel barrier intergate insulator" as claimed. Reconsideration and allowance of claims 1--6, 9-11, and 14-17 are requested.

Conclusion

Applicant respectfully submits that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney ((612) 349-9587) to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

JEROME M. ELDRIDGE ET AL.

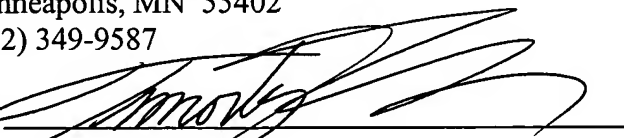
By their Representatives,

SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.
P.O. Box 2938
Minneapolis, MN 55402
(612) 349-9587

Date

2 April 2003

By


Timothy B. Clise
Reg. No. 40,957

CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: Commissioner of Patents, Washington, D.C. 20231, on this 2nd day of April 2003.

Name

Amy Moriarty

Signature

